

## Asian Lady Beetle

### Good Bug Gone Bad or Biocontrol Gets a Black Eye

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During the fall and winter of 1993-94 in western Washington, numerous complaints regarding lady beetles were received by county extension offices and pest control operators. In September and October homeowners became curious about insects found clustered on exposed, sunny walls of houses. However, as spring approached in February and March, adult beetles began moving into living spaces. Residents complained loudly (and understandably) about ladybugs in their food or being aroused from a deep sleep to beetles marching across their forehead. Curiosity status turned to nuisance and in some cases, nightmare, as tens of thousands were found in many homes.

From numerous west side accounts, lady beetle populations have been increasing since about 1991, but these numbers were insignificant compared to the 1993 explosion. Questions were being asked... What are they? Why are there so many? How do I get rid of them? Most people hesitated to use insecticides as they knew that lady beetles are beneficial.

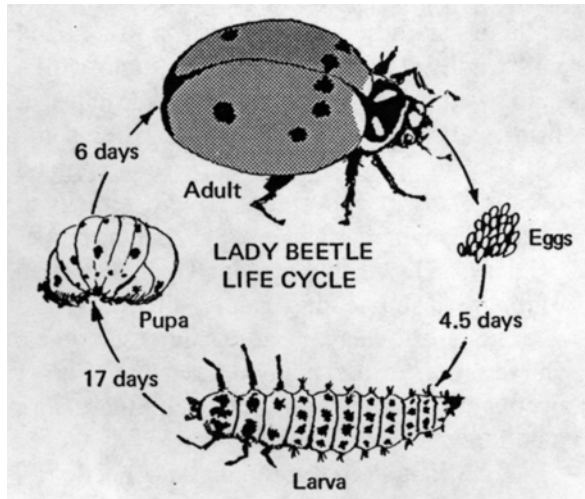
The species found so abundantly is the multicolored Asian lady beetle, *Harmonia axyridis* (Fig. 1), common in Japan, Korea, and other parts of Asia. "Multicolored" refers to tremendous color variation in this species, ranging from black with two red spots, to red with 19 black spots, and about every combination in between. These lady beetles were introduced by USDA Research scientists in the late 1970's & early 1980's as a biological control agent for pear psylla and other soft-bodied

insects.



**Fig. 1. Asian lady beetles.**  
**By A.L. Antonelli.**

Numerous releases occurred in the United States; the closest to western Washington were in Chelan, Klickitat, and Yakima Counties, all east of the Cascade Mountains. The insects did not establish in eastern Washington. High populations have also been reported from Oregon, Georgia, and Virginia. Others may have arrived here as unintentional passengers aboard cargo ships from the Orient. This avenue of introduction is used by many pests and must be more stringently monitored as trade with foreign countries increases.



**Fig. 2. Generalized lady beetle life cycle.**

Most lady beetle adults spend the winter months in clusters, protected from the weather. In their native home, *Harmonia axyridis* overwinters in cliffs, but in Washington, unfortunately, the next best thing is a house. Attracted to vertical surfaces, they often appear on light-colored walls with a south-southwest exposure. These 1/4" long insects enter wall voids through cracks and settle down for the winter. Warm interiors often draw them inside. Residents become frustrated because daily vacuuming does not seem to rid the structure of beetles.

Newly introduced insects often require 7-10 years to become established, thus the reason we are only now witnessing observable numbers. Being a recent introduction to the U.S., few natural enemies are available to keep *Harmonia axyridis* populations in check. This will necessitate management efforts by homeowners until the beetle population experiences a natural reduction.

Lady beetles are beneficial insects and should be preserved, if possible. Locating entry points and sealing up cracks and crevices will help reduce their numbers. Make certain that screens and doors are tight-fitting. Concentrate initial efforts on the south and west sides of infested structures. Each day, dispose of vacuumed up beetles well away from the building, as these insects are strong fliers and will readily return. A wet-dry vacuum works quite well for this. Vacuuming the clusters from walls during fall may also offer some relief. Insecticides are not recommended because lady beetle carcasses will remain in wall voids where other insects, such as carpet beetles, can use them for food. Upon depletion of this food source, they can readily move into your home and feed on carpets, linens, clothes, stored products, and many other items. Carpet beetles are extremely difficult to eliminate from a building.

Although this particular lady beetle is a nuisance during spring, they will eventually move out to locate their natural prey. Lady beetles do not feed on structural wood or stored products. They do produce a defensive odor for repelling predators, but it does not affect humans. In Georgia, pecan growers deliberately spread *Harmonia axyridis* larvae and adults from orchard to orchard to control aphids, greatly reducing their reliance on insecticides. In our area, we might see a decline in aphids, mites, and scale insects infesting ornamental trees and shrubs. High numbers of lady beetles can result in reduced insecticide use, leading to an improved environment. Caulking and a few weeks of vacuuming on our part may turn out to be a good investment for everybody.